The Clarendon Foundation has been involved in ITFS licensing since1991. Clarendon currently holds 14 ITFS licenses, and it has also assisted educational institutions in over 70 markets in acquiring ITFS licenses.

1. Concerns about the limitations of the Proposed MDS / ITFS Band Plan

This document is being submitted to comment upon =E2=80=9CA Proposal for Revising the MDS and ITFS Regulatory Regime=E2=80=9D submitted by the Wireless Communications Association International, Inc. and the National ITFS Association (=E2=80=9Cband plan=E2=80=9D). We support the band plan as far as it goes, but have concerns about the future impact of the plan and concerns about what is left out of the plan. These concerns emerge from the limitations of the plan. This proposal is grounded in the an analog model of instructional television, when media and data services are rapidly migrating into the digital realm.

The principal flaw in the proposal submitted by the NIA and WCAI is that the plan does not permit a flexible reallocation of channels in individual markets, depending upon what technology being utilized =E2=80=93 analog or two-way digital, and fixed or mobile services.

The mandatory reallocation of channels under the band plan will prevent any licensee from acquiring completely continuous spectrum. One channel from each ITFS license would be allocated to a Mid Band Segment (=E2=80=9CMBS=E2=80=9D) for analog instructional television use. The problem is that the vast majority of educational institutions do have any desire to use one channel for video.

2. The Deteriorating Viability of Instructional Television Services

It has been the experience of Clarendon Foundation over the past 12 years that wireless cable television is no longer viable in most areas of the country. Very few educational institutions have the capability of producing television programming. Most public schools already receive educational television programming from their existing cable operators. Most wireless cable systems have not survived. The technological battle is over and satellite service has prevailed.

Wireless Cable Television was only able to survive when there was a wireless operator to build and operate the system. Frequencies allocated to the MBS will in many areas simply be idle. Clarendon Foundation does not intend to use its mid-band channel for instructional television. Our mission will be to provide educational institutions with two-way digital data transmission services. Hence, under the proposed band plan, Clarendon Foundation will essentially lose 25 percent of its spectrum for each license.

3. The Need for Contiguous Spectrum

Contiguous spectrum is more valuable, both from a functional and economic perspective. The proposed band plan will make it more difficult for other

services requiring contiguous spectrum to be introduced into a market.

The proposed band plan addresses this issue, as follows:

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a process for converting the MBS portion of the band to low power, two-way
use, and elimination of the Transitional Bands, where the consent of all
affected parties is obtained.=E2=80=9D

This is not a future need; it is a current need for many license holders. In

those markets where there is a need, it is counterproductive to require
conversion of the middle bands later, because there is no need for the middl e
bands now.

Why is the consent of all parties needed - as long as the interference issue s
are addressed? Does this mean that all of the other educational institutions

and the entire community can be thwarted in rolling out a digital two-way
system by one licensee who is clinging onto 1960s technology?

The band plan (as proposed) will eventually have to be amended, when
instructional television is no longer viable. A better approach is to allow
for alternatives, rather than impose a uniform national plan that is
technologically obsolete from the moment it is adopted.

In order to obtain continuous spectrum under the proposed band plan, a trade

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This process could be long and convoluted. It would be subject to the whim o f
entities that may have competing uses for the spectrum and no incentive
assist another licensee in obtaining continuous spectrum. Moreover, some
licensees would likely hold out for payments or other considerations for any

proposed trade of channels.

These complicating factors are especially difficult for educational
institutions. The only viable solution is to introduce a streamlined
regulatory procedure for reallocating channels that allows licensees to
acquire contiguous spectrum.

4. Consistency with FCC Regulatory Policies

The FCC has embraced technological diversity in promulgating its new policie s
to allow for digital or analog and fixed or mobile use of the ITFS spectrum.

In so doing, it has rejected the approach of a uniform national plan for the

use of ITFS spectrum.

The proposed band plan is inconsistent with this regulatory approach. This inconsistency can be avoided by allowing licensees in markets that are not utilizing analog technology to make a single transition directly into an all digital-two way environment with contiguous spectrum. Proposing a plan that contemplates another plan at a later date is contrary to the policies for flexible use of spectrum.

There is no true public policy need for promoting wireless cable subscription television service in rural areas. All of these areas can be reached by satellite - without the line-of-sight problems and with much more content. There is no political support for protecting this ailing commercial market.

The FCC has implemented a strong public policy to encourage competition in broadband services between fixed wireless, Digital Subscriber Line, and cable access. The public policy for rapid development of broadband technology needs to be integrated into the band plan. The band plan could delay the implementation of broadband services on the ITFS channels.

5. Consistency with Economic Realities

The band plan must be consistent with economic realities. Historically, ITFS was not a viable service in most areas, because educational institutions did not have the financial resources to construct and operate a television broadcast facility. ITFS licensing accelerated in the 1980s when the FCC issued new regulations permitting the leasing of ITFS spectrum to commercial operators.

ITFS has become a partnership between educational institutions and wireless operators. The fact remains that wireless (and any other) operators are not going to invest in an obsolete technology - one that has failed in most areas. And most institutions do not have the funding to build and operate wireless systems on their own.

With no new investment and limited utilization of the spectrum in an analog mode, the band plan is more likely to lead to underutilization of the bandwidth.

The FCC decision not to reallocate the ITFS spectrum for 3 G uses was not a victory for either side. By authorizing mobile uses of the spectrum, the FCC decided to let the market determine which technology will prevail. Each locality should be allowed to make this determination for themselves, rather than being subject to a single national plan. Ultimately, the use of the spectrum is not a decision that ITFS licensees will independently make; it is a decision that will be dictated by market forces.

It is impossible to raise the capital needed to construct and continue to

operate a service, unless there is a demand or public support for it within the community. The demands, public support, and the economic viability of various wireless services will change over time. That is why flexibility must be written into the ITFS spectrum reallocation plan from the beginning.

6. Consistency with Technical Considerations

The new technology for fixed wireless broadband does not require as much spectrum for a viable system. Studies have indicated that a fixed wireless broadband system could serve the entire population of New York city with only 12 ITFS / MMDS channels. Hence, in some areas, operators could terminate ITFS leases for an analog instructional television service. The ITFS licensees could very well be left with a financial burden that cannot be sustained.

Wireless cable television was a failure in part because the lack of spectrum. This will not be a problem with fixed wireless broadband. In many markets, a variety of digital services could evolve - multiple fixed wireless systems, or a combination of fixed and mobile uses. ITFS licensees can respond to this development by organizing consortia that will assist in developing local plans for multiple uses of the ITFS spectrum.

What happens in the not-to-distant future when analog television disappears from the face of the earth? Another reallocation of the spectrum could be required. This inflexibility will also make it more difficult for other services to be introduced into a market on the ITFS channels.

We are about to witness a change in corporate strategy for utilization of spectrum. This will produce a significant shift in the relations between operators and ITFS licensees that do not embrace the digital model.

7. Implications of the Accelerating Transition to a Digital Environment

There are a number of implications concerning the rapidly accelerating transition to a digital services that need to be considered in implementing the band plan.

Media streaming is in its infancy, in part because of the lack of broadband services. Rolling out markets with fixed wireless broadband could allow licensees to transmit their instructional television programming over the internet, all across the country, not simply in their local areas.

The instructional programming would then be available to anyone with internet service, even if not on the one local system that is transmitting the ITFS programming. With wireless cable television, the only persons who could receive the instructional programming were the subscribers to the wireless cable system.

In many rural areas, fixed wireless broadband is the only viable broadband service. Fixed wireless will be far more valuable in developing local economies than a barely surviving wireless cable television system that is

losing subscribers every month. In reality, instructional television programming needs to migrate to satellite and the internet, as way to suppor
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The instructional value and utility of the internet and data transmission services greatly surpasses that of cable television for most educational institutions. Most schools and colleges don't produce their own video programming, but many of them have web sites and developing interactive content for the internet is much less costly.

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8. Conclusion and Recommendations

The plan implemented at this time should be a plan that will stand the test of time. One that will not have to be amended in a decade when there is no longer a need for instructional television service. Not one that is stuck in

an analog world.

The country is migrating to a digital environment. This change should be embraced by ITFS community, because the new technology will be better and more valuable for educational use by many licensees. The band plan must be expanded to provide a process for an immediate transition to an exclusively digital two-way service.

In light of the tremendous demand for spectrum, the proposed band plan is no
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a viable solution in areas where instructional television has been or is being discontinued. The bottom line is that each licensee should have a regulatory right to acquire completely continuous spectrum and channels should be reallocated on a market-by-market basis.

The band plan should include a regulatory procedure for the transition of a complete market to low power two-way digital service =E2=80=93 fixed wireles
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One final suggestion. Since the ITFS channels has been authorized for mobile

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